CLAIMS

1. Method of welding a metal sheet and a metal tube, comprising welding a metal bridging member to the metal tube, and welding a metal sheet to the bridging member.

2. The method of claim 1 including arc welding the bridging member to the metal tube.

3. The method of claim 2 wherein the bridging member is drawn arc welded to the metal tube.

4. The method of claim 1 wherein the bridging member comprises a metal patch having an edge welded to the metal tube and having a major side to which the metal sheet is spot welded.

5. The method of claim 1 wherein the bridging member comprises a bracket having a pair of legs that are welded to the metal tube and a web section connecting the legs and to which web section the metal sheet is spot welded.

6. The method of claim 1 wherein the metal sheet is spot welded to the bridging member.

7. The method of claim 1 wherein the metal tube has a tube wall thickness in the range of about 0.7 mm to about 4 mm.

8. Method of welding a metal sheet and a metal tube, comprising welding a pair of legs of a metal bridging bracket member to the metal tube and spot welding the metal sheet to a web section of the bracket member connecting its legs.

9. The method of claim 8 wherein the bracket member includes one or more protrusions on the web section before the metal sheet is welded, and the metal sheet is spot welded to the web section at each of the protrusions.

10. A welded sheet-to-tube structure, comprising a metal sheet welded to a bridging member that is welded to an exterior surface of a metal tube.

11. The structure of claim 10 including an arc weld between the bridging member and the metal tube.

12. The structure of claim 10 including a spot weld between the metal sheet and the bridging member.

13. The structure of claim 10 wherein the metal tube has a wall thickness in the range of about 0.7 mm to about 4 mm.

14. The structure of claim 10 wherein the metal sheet comprises a roof panel of a vehicle.

15. A welded sheet-to-tube structure, comprising a metal tube, a bracket member having a pair of legs whose ends are welded to the metal tube and a web section connecting the legs, and a metal sheet spot welded to the web section of the bracket member.

16. The structure of claim 15 wherein the bridging member comprises a metal patch having an edge welded to the metal tube and having a major side to which the metal sheet is spot welded.

17. The structure of claim 15 wherein the bridging member comprises a bracket having a pair of legs whose ends are welded to the metal tube and having a web section connecting the legs and to which web section the metal sheet is spot welded.

18. A welded sheet-to-tube automotive roof structure, comprising a metal automotive roof sheet spot welded to a plurality of bridging members that are welded to an exterior surface of a metal tube.